

Appl. No. 10/648,336
Amendment dated: February 28, 2007
Reply to OA of: November 30, 2006

REMARKS

This is in response to the Official Action dated November 30, 2006 in connection with the above-identified application. Applicants have amended the claims of the instant application in order to more precisely define the scope of the present invention taking into consideration the outstanding Official Action.

Specifically, Applicants have amended claims 1 and 10 to recite that the plurality of second electrodes alternate between connecting to a first conducting line of the plurality of first conducting lines and a second conducting line of the plurality of second conducting lines and that the plurality of second electrodes each connect to a different first conducting line or second conducting line. Accordingly, claims 1 and 10 now more clearly recite that not only do the second electrodes alternate between connecting to the plurality of first conducting lines and the plurality of second conducting lines, but also that each second electrode connects to a first or second electrically conductive line different from the other second electrodes. Support for these amendments may be found throughout the specification as originally filed, including, e.g., Figures 1 and 6, wherein it is shown that each electrode connects to a different conducting line. Accordingly, Applicants respectfully submit that the amendments to the claims do not introduce new matter into the application and the claims are in full compliance with the requirements of 35 U.S.C. §112.

Turning now to the outstanding Official Action, the Official Action begins by rejecting claims 1-25 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Official Action urges that there is no support in the specification as originally filed for the recitation of "wherein the plurality of second electrodes alternate between connecting to" the first and second conducting lines. The Official Action urges that Figure 1 does not show second electrodes being connected to conducting lines and Figure 6 only shows one set of conducting lines. Applicants respectfully traverse this rejection for the following reasons.

Applicants respectfully submit that, when considered as a whole, the

specification (including Figures 1 and 6) clearly discloses the claimed features of claims 1 and 10. The Official Action appears to view each Figure separately without consideration for what is depicted and disclosed in the other Figures. However, when considered in its entirety, Applicants respectfully submit that the specification, including the Figures, disclose a plurality of second electrodes that alternate between connecting to first conducting lines and second conducting lines.

With respect to Figure 1, Applicants respectfully submit that a simplified version of the claimed invention is shown wherein the second electrodes are not depicted in the illustration. Figure 1 leaves out the second electrodes such that the first electrodes located underneath may be clearly seen for purposes of understanding the invention claimed in the instant application. Applicants respectfully submit that this is a standard illustration in the art as may be seen by, e.g., reviewing the prior art cited in the outstanding Official Action.

Figure 5A of the Chang reference shows the OLED display disclosed in the reference wherein only electrodes 503 are depicted. Then, Figure 5B shows the OLED display disclosed in the reference wherein only electrodes 505 are depicted. Finally, Figure 5C illustrates the combination of Figures 5A and 5B. As may be seen, the structure shown in Figure 5C is complicated and difficult to interpret because of the overlapping structures shown in Figures 5A and 5B. Chang provides views of Figures 5A and 5B to more clearly illustrate the disclosed invention. Similarly, Figure 1 of the instant application depicts the claimed structure without the second electrodes in order to provide a simplified view of the invention.

In Figure 1 of the instant application, Applicants have elected to show the first electrodes but not the second electrodes. Despite not showing the second electrodes, Applicants have elected to show the first conducting lines 141 and the second conducting lines 142 that would connect to the second electrodes were they to be illustrated in Figure 1. However, Applicants respectfully submit that the failure to show the second electrodes connected to the first and second conducting lines in Figure 1 in no way suggests that the conducting lines do not connect to the second electrodes.

In fact, this would be a flawed interpretation based both on what is shown in, e.g., Figure 6, and that the original claims indicate that the second electrodes connect to a first conducting line or a second conducting line. Had Chang shown the lead wires 504 in Figure 5B without showing the first electrodes 503 they connect to, one of ordinary skill in the art would not reasonably conclude that the lead wires 504 do not connect to the first electrodes in the completed structure. Rather, one of ordinary skill in the art would understand the simplification of the drawings in order to more clearly show features of the disclosed structure. Accordingly, the assertion in the Official Action that Figure 1 does not support the amended claims because the second electrodes are not depicted represents an overly narrow and unreasonable interpretation of the application.

Just as Chang presents Figure 5C to show a more completed view of the disclosed invention, so does the instant application present Figure 6 to show a more completed view of the claimed invention. In Figure 6, the second electrodes are depicted and additionally it is shown how the second electrodes connect to second conducting lines. The second electrodes that connect with the first conducting lines are not shown because they are covered by the portion of the barrier cover 16 not cut away. Yet by looking to the entirety of the application, it may be seen that the second electrodes clearly connect to the first conducting lines in an alternating fashion. Firstly, Applicants again note original claim 1, which indicates that the second electrodes are connected to the first conducting lines or the second conducting lines. Secondly, returning to Figure 1, the offset alignment of the first conducting lines and the second conducting lines clearly indicates that the first, third, fifth, etc. second electrodes will be aligned with the second conducting lines while the second, fourth, sixth, etc., second electrodes will be aligned with the first conducting lines once the second electrodes are laid over the top of the first electrodes.

In summary, Applicants respectfully submit that Figure 1 clearly shows offset alignment of the first conducting lines from the second conducting lines, thus indicating that the second electrodes will connect to the first and second conducting lines in an

Appl. No. 10/648,336
Amendment dated: February 28, 2007
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alternating fashion. This alternating connection pattern is depicted in Figure 6 with respect to the second conducting lines connecting to the second electrodes. Because it is well understood from the remainder of the specification that connection of the first conducting lines to the second electrodes occurs under the cover 16, it follows that the alternating connection pattern also occurs with respect to the first conducting lines connecting to the second electrodes. For all of the above reasons, Applicants respectfully submit that, given a reasonable interpretation of the specification, the recitation of "plurality of second electrodes alternate between connecting to" is supported by the instant application as originally filed. Accordingly, Applicants respectfully request that the rejection of claims 1-25 under 35 U.S.C. §112, first paragraph, be withdrawn.

The rejection of claims 1-5, 10, 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over Chang (US Pub. App. No. 2003/0193792) in view of Yonekura et al. (US Pub. App. No. 2002/0149313) has been carefully considered but is most respectfully traversed in light of the amendments to the claims and the following comments.

Applicants wish to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a

Appl. No. 10/648,336
Amendment dated: February 28, 2007
Reply to OA of: November 30, 2006

claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants also most respectfully direct the Examiner's attention to MPEP § 2144.08 (page 2100-114) wherein it is stated that Office personnel should consider all rebuttal argument and evidence presented by applicant and the citation of In re Soni for error in not considering evidence presented in the specification.

The Official Action urges that Chang discloses all of the elements of claims 1 and 10 with the exception of disclosing a plurality of second electrodes that alternate between connecting to a first and a second conducting line. To address this deficiency in the Chang reference, the Official Action cites Yonekura as allegedly disclosing a panel for an organic EL device having a plurality of first electrodes and a plurality of second electrodes, wherein the second electrodes alternate between connecting to a first conducting line and a second conducting line. The Official Action alleges that it would have been obvious to modify the OLED of Chang with the teaching of Yonekura for the purpose of distributing electric current in a balanced manner. Applicants respectfully traverse this rejection in light of the amendments to the claims and the following comments.

Firstly, Applicants respectfully submit that Yonekura does not teach second electrodes that alternate between connecting to a first conducting line and a second conducting line. The Official Action alleges that Yonekura discloses in Figure 9 second electrodes 70 that alternate between connecting to a first conducting line 64 and a second conducting line 65. However, Applicants respectfully submit that these characterizations of the elements shown in Figure 9 are incorrect and unreasonable. For example, paragraph [0071] of Yonekura states that reference number 64 denotes a scanning circuit for outputting the scanning signals to the gate line 68, not a first conducting line as recited in claims 1 and 10. Furthermore, Yonekura states that reference number 65 denotes a current feeding driving circuit, not a second conducting

Appl. No. 10/648,336
Amendment dated: February 28, 2007
Reply to OA of: November 30, 2006

line as recited in claim 1 and 10. Finally, Applicants note that reference number 70 is not even identified or discussed in the Yonekura reference, and therefore there is no support in the reference for the allegation that reference numeral 70 denote a second electrode. The Official Action provides no support or rationale for the characterizations of reference numbers 64, 65 and 70 advanced in the outstanding Official Action and therefore Applicants respectfully submit that a *prima facie* case of obviousness has not been established. Absent a more clear teaching or suggestion that Yonekura discloses second electrodes that alternate between connecting to first conducting lines and second conducting lines, Applicants respectfully submit that a proper §103 rejection of claims 1 and 10 according to the guidelines set forth in MPEP §2143 has not been established and should therefore be withdrawn.

Even assuming, *arguendo*, that Yonekura discloses the feature alleged in the Official Action, Applicants respectfully submit that Yonekura does not teach that the plurality of second electrodes each connect to a different first conducting line or second conducting line as recited in the newly amended claims. As discussed above, claims 1 and 10 now recite that the second electrodes each connect to a different first or second conducting line as shown in, e.g., Figure 6. Thus, in the present invention, no single first or second conducting line connects to the same second electrode. To the contrary, Yonekura clearly shows in Figure 9 that multiple second electrodes 70 connect to the same second conducting line 65. That is to say, Figure 9 depicts the three horizontal lines representing the alleged second electrodes 70 connecting to a single conducting line 65 at the right side of the structure. Because Yonekura clearly fails to disclose or suggest this element of amended claims 1 and 10, Applicants respectfully submit that a proper §103 rejection of claims 1 and 10 according to the guidelines set forth in MPEP §2143 has not been established and should therefore be withdrawn.

Finally, Applicants respectfully submit that the Official Action has failed to provide a proper motivation statement required to establish a proper §103(a) rejection according to the guidelines set forth in MPEP §2143. The Official Action urges that it would have been obvious to combine the teaching of Yonekura with the OLED of Chang for the

Appl. No. 10/648,336
Amendment dated: February 28, 2007
Reply to OA of: November 30, 2006

purpose of distributing electric current in a balanced manner. This motivation appears to be attributed to the specification of the Yonekura reference (see, e.g, the fourth full paragraph on page 4 of the outstanding Official Action), yet no citation is provided for where in Yonekura the feature of second electrodes alternating between connecting to first and second conducting lines is said to distribute electric current in a balanced manner. In fact, a careful review of the entire Yonekura reference reveals that no such statement exists in the reference. Applicants again note that to establish a *prima facie* case of obviousness, there must be some motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. The reference clearly fails to support the alleged motivation and no support has been provided for an allegation that the motivation is in the knowledge generally available to one of ordinary skill in the art. Finally, Applicants respectfully submit that the motivation statement does not even make sense. How does the configuration of Yonekura more evenly distribute current than the configuration of the Chang reference such that one would be motivated to modify Chang according to Yonekura? For all of the above reasons, Applicants respectfully submit that a proper motivation statement has not been provided and therefore a §103 rejection according to the guidelines set forth in MPEP §2143 has not been established. Applicants therefore respectfully request that the obviousness rejection of claims 1 and 10 be withdrawn.

Furthermore, because claims 2-5, 16 and 17 each depend either from claim 1 or claim 10, Applicants respectfully submit that claims 2-5, 16 and 17 are also patentable over Chang and Yonekura for the same reasons as provided above with respect to claims 1 and 10. Accordingly, Applicants respectfully request that the obviousness rejection of claims 2-5, 16 and 17 also be withdrawn.

The rejection of claims 6-8 and 18-20 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Lu (US Pat. No. 6,559,604), the rejection of claims 9 and 21 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Ogura (US Pat. No. 6,924,594), the rejection of claims

Appl. No. 10/648,336
Amendment dated: February 28, 2007
Reply to OA of: November 30, 2006

11-13 and 22 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Endo et al. (US Pat. No. 6,507,384), the rejection of claim 14 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Holland et al. (US Pat. No. 4,217,020), the rejection of claim 15 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura, Holland and Endo, the rejection of claim 23 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Kawaguchi et al. (US Pat. No. 5,400,221) and the rejection of claims 24 and 25 under 35 U.S.C. §103(a) as being unpatentable over Chang in view of Yonekura and Katsumata (US Pat. No. 6,826,016) have each been carefully considered but are most respectfully traversed in light of the amendments to the claims and the following comments.

The basis for each of the above identified rejections is the §103(a) rejection of claims 1 and 10 over Chang in view of Yonekura. However, as described in detail above, Chang and Yonekura, either standing alone or when taken in combination, fail to disclose or suggest each and every feature of claims 1 and 10. Moreover, Applicants respectfully submit that none of the secondary references cited are capable of remedying the deficiencies identified above with respect to obviousness rejection of claims 1 and 10. Accordingly, since the basis for each of the §103(a) rejection is defective, Applicants respectfully submit that each of the §103(a) rejections is defective. Therefore, as a proper §103(a) rejection according to the guidelines set forth in MPEP §2143 has not been established for any of the dependent claims, Applicants respectfully request that these rejections be withdrawn.

Additionally, Applicants respectfully submit that several of the obviousness rejections of the dependent claims set forth in the Official Action are defective because they improperly apply one motivation statement for multiple proposed modifications regardless of whether the motivation statement is even relevant to the proposed modification. This issue was raised in the previous Response filed September 7, 2006, but the Official Action failed to correct or address this issue. Accordingly, Applicants again draw attention to the error and respectfully request that the next Official Action

specifically respond to Applicant's comments.

The rejection of claims 6 and 7 as being obvious over Chang, Yonekura and Lu will be used as an example of the improper use of a single motivation statement for multiple rejections. The Official Action recognizes that Chang and Yonekura fail to disclose a pixel defining layer located between the organic EL medium as recited in claim 6. The Official Action then relies upon Lu as disclosing a pixel defining layer located between the organic EL medium and alleges that it would have been obvious to modify the OLED of Chang and Yonekura as taught by Lu "for the purpose of defining the pixel area". Subsequently, the Official Action urges that Lu also discloses auxiliary electrodes located on the surface of or embedded in the first electrodes as recited in claim 7 and further urges that it would have been obvious to modify the OLED of Chang and Yonekura as taught by Lu for the same "combining reason" as provided in the rejection of claim 6. As best understood, this statement alleges that it would have been obvious to modify the OLED of Chang and Yonekura such that the auxiliary electrodes are located on the surface of or embedded in the first electrodes "for the purpose of defining the pixel area". Clearly, this motivation statement is wholly illogical as the feature being discussed (i.e., auxiliary electrodes located on the surface of or embedded in the first electrodes) has nothing to do with the motivation provided (i.e., for the purpose of defining the pixel area). Why would one of ordinary skill in the art at the time of the invention modify the OLED of Chang and Yonekura such that the auxiliary electrodes are located on the surface of or embedded in the first electrodes for the purpose of defining the pixel area? The Official Action does not appear to recognize that while one secondary reference may be relied upon to disclose multiple features of the claimed invention, the motivation statement provided for the proposed modification must still relate to the specific feature being rejected. One motivation statement may not be applied to all of the features where the features are not in some way related. Accordingly, several of the obviousness rejections of the dependent claims, including the rejection of claim 7, are also deficient for failure to provide a proper motivation statement and should therefore be withdrawn.

Appl. No. 10/648,336
Amendment dated: February 28, 2007
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In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,

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February 28, 2007